

# Coursebook for students

2018/2019

## General Surgery



**Department of General, Hepatobiliary and  
Transplant Surgery  
Collegium Medicum in Bydgoszcz  
Nicolaus Copernicus University of Toruń**

Authors: dr hab. Maciej Słupski, prof. dr hab. Zbigniew Włodarczyk, dr Jakub Szmytkowski

*Dear Students of the 3<sup>rd</sup>, 4<sup>th</sup> and 6<sup>th</sup> year of the Medical Faculty  
Collegium Medicum in Bydgoszcz  
Nicolaus Copernicus University of Toruń,*

*Bydgoszcz, September 2018*

*Ladies and Gentlemen,*

*On behalf of the faculty of the Department of General, Hepatobiliary and Transplant Surgery let me extend my warmest welcome to all of you in this academic year 2018/2019. I hope that the lectures, seminars and tutorials prepared by us will be a source of theoretical knowledge in the field of general surgery, as well as provide you with an opportunity to learn some practical skills. We will do our utmost to ensure this.*

*The Department of General, Hepatobiliary and Transplant Surgery is situated on the 1st floor of the main building of dr A. Jurasz University Hospital No.1 in Bydgoszcz, ul. M. Curie Skłodowskiej 9. Some of the classes will take place at the Department of Surgery and Clinical Nutrition of the dr E. Warmiński Municipal Hospital in Bydgoszcz (Head: dr Jacek Szopiński, PhD) situated at ul. Szpitalna 19.*

*Some groups will conduct tutorials at the Dept. of Transplantology and General Surgery.*

*Please direct all your further inquiries to dr hab. n. med. Wojciech Szczęsny.*

*Dr hab. n. med. Maciej Słupski*

*The faculty members are:*



*Dr hab. n. med. Maciej Słupski, specialist in General Surgery and Transplantology  
Head of the University Department of General, Hepatobiliary and Transplant Surgery*



*Dr hab. n. med. Wojciech Szczęsny, specialist in General Surgery, adjunct professor  
responsible for student affairs at the Department of General, Hepatobiliary and  
Transplant Surgery, dr A. Jurasz University Hospital No. 1*



*Dr Jacek Szopiński MD PhD, specialist in General Surgery, adjunct professor responsible  
for student affairs at the dr E. Warmiński Municipal Hospital*



*Dr Jakub Szmytkowski MD PhD, specialist in General Surgery*



*Dr Stanisław Pierściński MD PhD, specialist in General Surgery, senior assistant*



*Dr Karolina Horbacka MD PhD, specialist in General Surgery, assistant*



*Dr Jacek Pypkowski MD, specialist in General Surgery, senior assistant*

- *In exceptional instances classes may be conducted by other members of the faculty.*
- *Please direct all your further inquiries to dr hab. Wojciech Szczęsny.*

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## 1. Rules of the Course

### A. Preparation for class

1. Each student must have a set of hospital clothes (white scrubs and/or skirt, lab coat, change of shoes. Students wearing casual clothes will not be allowed to participate in clinical activities.
2. Due to the specifics of work at a surgical ward, please limit the amount of jewelry worn, please wear your hair tied back and take care to have clean, clipped, unpainted nails.
3. Due to sanitary considerations, your set of hospital clothes should be clean and pressed during clinical activities. Students in contaminated / crumpled clothes will not be allowed on surgical wards.
4. Students are required to observe workplace safety rules.
5. Students are required to maintain patient – physician confidentiality and to keep any medical data in strict confidence. It is unacceptable to discuss clinical cases in public places (e.g. cafeterias, hallways, elevators) for this could compromise patient – doctor confidentiality.

### B. Organization of the course

1. The schedule, along with division into study groups, is displayed 10 days before the scheduled start of the course. No personal changes in study groups are allowed after that time.
2. Clinical activities take place at times which will be made available to every group before the course commences. During that time, **students are required to remain on the ward or in places designated by their teachers**. Unauthorized leaving of the ward will be treated as an unexcused absence.
3. On the first day of the course, an organizational meeting will be held for the group. The rules and organization of the course will be presented, as will the grading principles, workplace safety rules and credit requirements. Each student will then be issued a **scoring card**, which they must turn in at the completion of the course in order to obtain credit. If you lose your scoring card, please notify your teacher.

4. The daily activities include:
  - morning rounds
  - bedside examination
  - completing case files
  - assisting surgical procedures as instructed by the teacher
  - using the intrahospital data network
  - practicing surgical skills
  - discussion of selected cases
  - other activities designed by the teacher
  - seminars (Years 4 and 5, according to schedule) **held in the seminar room**; for organizational reasons, the exact hour of the seminars is subject to change, students will be notified at the earliest possible time.
5. A Seminar is an active form of information exchange, involving student participation. Group leaders and teachers assign seminar topics which are then presented by the students. All of the students are required to **be acquainted with the seminar topic**, which will be evaluated by the teacher. Unprepared students will fail the seminar and have to retake it by the completion of the course.
6. Students are required to acquire practical skills, as listed in the Practical Skills Chart. Afternoon shifts and clinical activities are a perfect time to perfect your skills.
7. Each study groups is obliged to prepare a presentation on one of the **clinical problems**, in coordination with their teacher. This presentation is then given to the whole study group in the form of a seminar. If you are interested in another problem outside of the list provided by the faculty, you are welcome to explore it after coordinating with your teacher.
8. The seminar room is equipped with a computer with access to the Internet and hospital data network. The use of this computer is limited to scientific or didactic purposes, after approval from the teacher.
9. During the course, students are required to attend at least one **afternoon shift from 15.00 to 20.00**. After arriving for their afternoon shift, the students must report to the shift leader or surgeon on call. The students are then assigned tasks and duties by the shift leader, who confirms the completion of the shift on the scoring card. The maximum number of students reporting for an afternoon shift is **4 students for Years 4 and 3**. The afternoon shift schedule is created by the group leader at the beginning of the course.
10. All students are required to actively **participate in activities in the Surgical Suite**. On their scheduled days, students report at **07:30** to the Head of the Surgical Suite or a designated contact person, who assigns them to operating theaters and instructs them in their duties. After completion of the activities, the Head of the Surgical Suite gives the student credit on their Scoring Card. On the day spent at the Surgical Suite the student is not required to participate in clinical activities; they must, however, take part in seminars (Year 4 and 5). **It is strictly prohibited to bring unauthorized guests to the Surgical Suite.**
11. Each of the students must assist at least one surgical procedure, which is confirmed on the Scoring Card by the operating surgeon.

12. Tardiness or unexcused absences need to be made up by participating in an extra afternoon shift. An excused absence(**only emergencies and /or sickness – sick note from physician required**) of more than 3 days requires retaking the course with another group or – in special cases, approved by the Head of the Department - credit can be gained in another form (details to be discussed in each individual case with the teacher responsible for student affairs).
13. An unexcused absence which has not been made up results in failing the course.
14. Any queries, organizational matters etc. should be reported to teachers responsible for student affairs or – in case they are absent – to their designated replacement.
15. Students are entitled to voice their concerns or lodge complaints directly with the Head of the Chair.

## 2. Grading principles

**The final grade is composed (averaged) of the following:**

**ENTRANCE EXAM**, which takes place on the 1<sup>st</sup> or 2<sup>nd</sup> day of the course. It consists of a single – choice test including the following topics:

- for 3<sup>rd</sup> year students – **anatomy and physiology of the abdomen**
- for 4<sup>th</sup> year students – **aseptic and antiseptic technique, purulent infections in surgery, anatomy and physiology of the abdomen, alimentary tract and vascular system, and the topics covered in the 3<sup>rd</sup> year**
- for 5<sup>th</sup> year students - **anatomy and physiology of the alimentary tract and vascular system, topics covered in the 3<sup>rd</sup> and 4<sup>th</sup> year.**

Students who fail the entrance exam are required to take a retake test within 3 days. If they fail the retake (grade 2.0), the Head of the Chair or a designated teacher gives another oral retake, with two possible outcomes: “pass” (3.0) or “fail” (2.0). Failing the oral retake disqualifies the student from participating in the course, thus causing them to fail it. Final grade: 2,0.

**ORAL EXAM heard by respective group teachers** takes place on the last day of the course. The teachers evaluate the overall activity level of the student throughout the course. All of the seminars, clinical activities, surgical suite duties, assisting surgical procedures must be recorded on the Scoring Sheet. In cases of blatant disregard of the rules or inadequate student activity, the teacher may lower the final grade. In case of failing the oral exam (grade 2.0), the Head of the Chair or a designated teacher gives an oral retake, with two possible outcomes: “pass” (3.0) or “fail” (2.0). Failing the oral retake equals failing the whole course. Final grade: 2.0.

**EXIT TEST** - a single-choice test on the topics covered during the lectures and seminars is held after all of the groups have completed the lectures and seminars. This **final test** may only be attempted by students who have all of the required credits on their Scoring Sheet and who have achieved at least a 3.0 on their **entrance exam** and **oral exam**.

**Test score thresholds:**

score	mark
92-100%	5,0
84-91%	4,5
76-83%	4,0
68-75%	3,5
56-76%	3,0
0-55%	2,0 (failed)

Students who have failed (2.0) the ext test are entitled to a retake on a date set by the teacher responsible for student affairs. The form of this retake (oral or written) will be determined by the Head of the Chair. Failing the retake equals failing the course. Final grade: 2.0.

For students who have passed the entrance test, oral exam and exit test, the final grade is the arithmetic mean of the grades awarded for these exams, rounded up to 3.0 , 3.5 , 4.0 , 4.5 , 5.0. Individual activity during classes may be awarded with extra points, from 0 (no activity) up to 5 (extraordinary activity), added to the result of exit test.

**In case of failing the class, there will be no opportunity to attend the course again at a later**

**date.**

All of the Scoring Sheets must be collected by the Group Leader and returned to the supervising teacher no later than 14 days after completion of the course.

Losing or failing to present one's Scoring Sheet after completion of the course necessitates obtaining credit for all of the seminars and retaking the Oral Exam.

**The teacher responsible for students' affairs in the study year 2018/19 is  
dr Jakub Szmytkowski, substituted by dr hab. Wojciech Szczęsny.**

2018/19

3. Types of classes / hours, study year 2018/2019

Type of class/Study Year	Hours 2018/19
<b>3rd year</b>	
Lectures	45
Seminars	0
Clinical activity	45
<b>4th year</b>	
Lectures	15
Seminars	30
Clinical activity	45

#### **4. FORMS OF TEACHING**

##### **A. Lecture**

The lecture remains the most traditional form of academic teaching; it is based on didactic content being presented to the audience, often with the aid of multimedia. We shall do our utmost to ensure that the lecturers are selected from amongst the most experienced members of the faculty, wherever possible - independent research fellows bearing the title of professor or assistant professor. Questions are encouraged after the completion of the lecture or, if the lecturer consents, during its course. The presentations used during the lectures will be made available on the Chair's webpage. Please bear in mind that, according to the syllabus, attendance is mandatory and your presence will be confirmed by signing an attendance roster. All unexcused absences as well as more than 3 absences excused by a sick note require the student to see the lecturer and pass a test on its topic.

##### **A. Seminar**

The seminar is a teaching method based on active participation on the part of the students, who explore a part of the topic of the seminar on their own and present their findings to the rest of the class, typically in the form of a multimedia presentation. The students also actively participate in the discussion of the seminar topics, which provides an opportunity for them to demonstrate their knowledge. The list of seminars, found in this Course Book, contains a list of problems to be discussed during each seminar. Ideally, a group of 2 to 3 students should prepare each seminar, according to a roster prepared before the course by the group leaders; all of the students, though, must be prepared to take an active part in the discussion. A seminar is based on a presentation, providing discussion pointers. The teacher in charge of the seminar acts as a moderator of the dispute and provides additional information to that presented by the students; he does not lead the discussion. Activity during the seminars is graded.

##### **B. Tutorials (clinical activity)**

The tutorials are the basic form of teaching and the best way to gain hand knowledge and clinical experience. The rules of participation are covered in the Rules section of this Coursebook. Please respect the fact that the patients you encounter during your course are ill people, suffering from anxiety caused by their condition and forced separation from their loved ones. It is for the patient to decide whether they want to take part in your learning process. Neither the patients nor their problems may be discussed in public places: the canteen, elevators or hallways. Patient-doctor confidentiality is of utmost importance. Violation of it is not only a breach of the Medical Code of Conduct, but also an offence. Students must keep this in mind.

## **5. The responsibilities of faculty staff members**

### **Surgery Teaching Coordinator**

1. Coordinates the curriculum with Heads of individual surgical departments
2. Coordinates the schedule with the Dean's office and Heads of Departments
3. Schedules and organizes the exit exams
4. Schedules and organizes the final exams
5. Supervises the consistency of the curricula taught in individual departments

### **Head of Chair**

1. Maintains quality control of the teaching process in his/her Department
2. Periodically inspects the class during the course; evaluates the quality of teaching at least once per semester
3. Supervises data entry into the USOS system

### **Adjunct responsible for didactics**

1. Informs the students of study group composition, schedules the tutorials and seminars in his/her Department,
2. Provides organizational and job safety training for each student group
3. Supervises the entrance exam
4. Coordinates any diversions from the schedule
5. Maintains records of tardiness, absences, sick notes etc.
6. Helps solve any student – teacher conflicts

### **All Teachers – lectures**

1. Prepares a PowerPoint framework for the lecture, which he makes available to the students
2. Checks attendance
3. Deposits the attendance roster with Mrs. M. Kosmal, Secretary of the Dept. of General, Hepatobiliary and Transplant Surgery
4. In case of a planned absence, coordinates with the Dean's Office and the Class Representative as to a new date for the lecture
5. Is entitled to swap lecture dates with another teacher, provided he notifies the Class Representative via the Dean's Office.

### **All teachers – seminars and tutorials**

1. Prepares a framework for the lecture, which he makes available to the students no later than two weeks before the scheduled seminar

2. Checks attendance
3. Deposits the attendance roster in the appropriate Secretary's office
4. conducts the exit oral exam and deposits the scoring sheet in the appropriate Secretary's office

2018/19

# Medical Faculty, 3<sup>rd</sup> year

SCHEDULE FOR THE ACADEMIC YEAR 2018/2019.

	<b>week</b>
Group 1a; 1b	08.05.-22.05.
English division	English division

**Site:**

**Department of General, Hepatobiliary and Transplant Surgery**

**Jurasz University Hospital**

**M. Curie Skłodowskiej 9, Bydgoszcz**

**Head: dr hab. Maciej Słupski**

***Department of Surgery and Clinical Nutrition of the dr E. Warmiński Municipal  
Hospital in Bydgoszcz***

***Head: dr Jacek Szopiński, PhD***

## 1. SYLLABUS

**Course name:** Introduction to Surgery

**Study year:** 3

**Faculty:** medical

**Form:** lectures 45h  
tutorials 45h

**Final credit:** graded credit (grade point average from the following:

- entry exam (single choice test);
- exit exam (single choice test given after completion of all lectures);
- clinical activity score (oral, grade awarded by individual teachers).

**Scoring:**

score	mark
92-100%	5,0
84-91%	4,5
76-83%	4,0
68-75%	3,5
56-76%	3,0
0-55%	2,0

**Course goals:**

- 1) to promote and develop teamwork skills, to acquaint the student with patient documentation, to teach the student to efficiently peruse databases and other sources of modern surgical knowledge
- 2) to acquaint the student with the rules of aseptic and antiseptic technique; to theoretically and practically familiarize the student with the work in the surgical suite
- 3) to convey knowledge on the basic medico-legal aspects of surgery; to acquaint the student with the history of surgery
- 4) to familiarize the student with the basics of surgical examination and to teach them to practically implement this skill
- 5) the student should gain an appreciation of the similarities and differences between surgery and other medical specialties.
- 6) to familiarize the students with the basic surgical instruments and skills
- 7) to acquaint the student with the basic problems of clinical surgery, including participation in at least one afternoon on – call at the surgical Emergency Room

**By the completion of the course, the student should be able to:**

- 1) handle themselves appropriately in the Surgical Suite and Operating Theater
- 2) follow the rules of aseptic and antiseptic technique
- 3) examine a surgical patient
- 4) properly prepare a patient for surgery
- 5) discern between various types of wounds and be able to perform basic wound closure
- 6) catheterize the urinary bladder

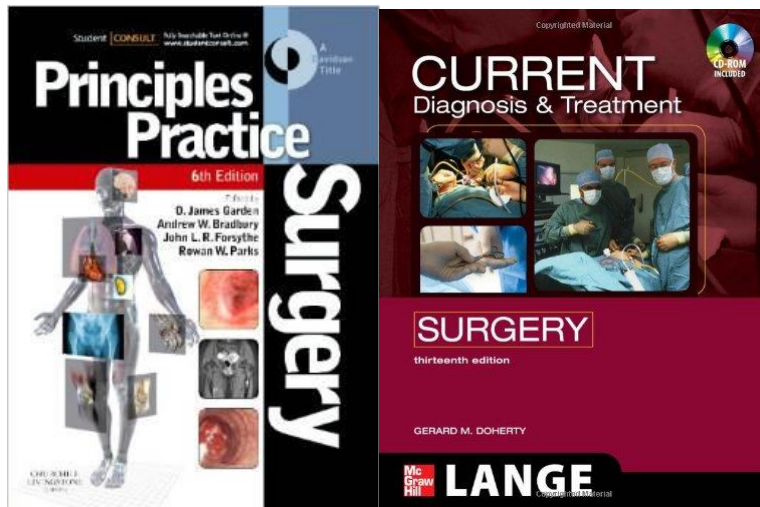
**By the completion of this course, the student should have gained sufficient theoretical knowledge in the following areas:**

- 1) history of surgery
- 2) medico – legal aspects of surgery
- 3) organization of a surgical suite
- 4) types of wounds and the mechanisms of wound healing
- 5) perioperative management
- 6) fluid and electrolyte balance in surgical patients
- 7) anesthesia and analgesia in surgery
- 8) surgical site infections and rules for antimicrobial therapy in a surgical ward
- 9) minor surgery
- 10) abdominal hernias
- 11) acute gastrointestinal hemorrhage
- 12) acute bowel obstruction
- 13) endoscopy
- 14) appendicitis, peritonitis and shock
- 15) thermal injuries
- 16) abdominal and thoracic trauma

#### **Lectures during the course**

No. Topic	Hours
1. Introduction to the surgery	1
2. History of surgery	2
3. Medico – legal aspects of surgery	2
4. Organization of a surgical suite. Principles of aseptic and antiseptic technique.	2
5. Examination of a surgical patient	3
6. Types of wounds. Mechanisms of wound healing. Surgical instruments and materials.	2
7. Preoperative and perioperative management	2
8. Fluid and electrolyte balance in the surgical patient	2
9. Analgesia and pain control in surgery	2
10. Hospital infections and the principles of rational antimicrobial therapy	2
11. Minor surgery. Purulent infections	2
12. The acute abdomen, peritonitis and septic shock	2
13. Appendicitis	2
14. Bowel obstruction	2
15. Gastrointestinal bleeding	2
16. Abdominal hernias	2
17. Burns and thermal injuries	2
18. Abdominal trauma	2
19. Thoracic trauma	2
20. Diagnostic and curative endoscopy in surgery	2
21. Laparoscopic surgery	2
22. Vascular and peritoneal access in end-stage renal disease	2

**Recommended reading:**



1. Principles Practice. D. James Garden, Andrew W. Bradbury
2. Current diagnosis and treatment. Surgery. Gerard M. Doherty.

## 2. LECTURES „Introduction to surgery”, III year, Medical Faculty, year 2018/2019

No.	Lecture topic	Duration	Lecturer	date	time
1	Introduction to surgery	1	Dr hab. <b>Wojciech Szczęsny</b>	08.10.	14:00-15:30 W 30 Sklodowskiej 9
2	History of surgery.	2	Dr <b>Jakub Szymkowski</b>	16.10.	15:45-17:15 W 30 Sklodowskiej 9
3	Organization of a surgical suite. Principles of aseptic and antiseptic technique.	2	Dr <b>Arkadiusz Migdalski</b>	<b>30.10.</b>	15:45-17:15 W 30 Sklodowskiej 9
4	Medico-legal aspects of surgery.	2	Prof. dr hab. <b>Zbigniew Włodarczyk</b>	<b>06.11.</b>	15:45-17:15 W 30 Sklodowskiej 9
5	Examination of a surgical patient.	2	Prof. dr hab. <b>Arkadiusz Jawień</b>	13.11.	15:45-17:15 W 30 Sklodowskiej 9
6	Types of wounds. Mechanisms of wound healing. Surgical instruments and materials.	2	Prof. dr hab. <b>Arkadiusz Jawień</b>	20.11.	15:45-17:15 W 30 Sklodowskiej 9
7	Preoperative and perioperative management	2	Dr hab. <b>Wojciech Szczęsny</b>	27.11.	15:45-17:15 W 30 Sklodowskiej 9
8	Fluid and electrolyte balance in the surgical patient	2	Dr <b>Jacek Szopiński</b>	04.12.	17:30-19:00 W 30 Sklodowskiej 9
9	Analgesia and pain control in surgery	2	Dr hab. <b>Wojciech Szczęsny</b>	<b>11.12.</b>	18:15-19:45 W 30 Sklodowskiej 9
10	Hospital infections and the principles of rational antimicrobial therapy	2	Dr <b>Marek Masztalerz</b>	18.12.	17:30-19:00 W 30 Sklodowskiej 9
11	Minor surgery. Purulent infections	2	Dr <b>Włodzimierz Gniłka</b>	08.01.	17:30-19:00 W 30 Sklodowskiej 9
12	The acute abdomen, peritonitis and Septic shock.	2	Dr hab. <b>Jacek Szeliga</b>	15.01.	15:45-17:15 W 30 Sklodowskiej 9
13	Appendicitis.	2	Dr hab. <b>Maciej Słupski</b>	22.01.	17:30-19:00 W 30 Sklodowskiej 9
14	Bowel obstruction.	2	Prof. dr hab. <b>Marek Jackowski</b>	26.02.	15:45-17:15 W 30 Sklodowskiej 9
15	Gastrointestinal bleeding.	2	Dr		15:45-17:15

			<b>Włodzimierz Gniłka</b>	05.03.	W 30 Skłodowskiej 9
16	Abdominal hernias.	2	D hab. <b>Jacek Szeliga</b>	12.03.	15:45-17:15 W 30 Skłodowskiej 9
17	Burns and thermal injuries.	2	Dr <b>Jakub Szmytkowski</b>	19.03.	18:15-19:45 W 30 Skłodowskiej 9
18	Abdominal trauma	2	Prof. dr hab. <b>Zbigniew Włodarczyk</b>	26.03.	15:45-17:15 W 30 Skłodowskiej 9
19	Laparoscopic surgery	2	Prof. dr hab. <b>Marek Jackowski</b>	02.04.	15:45-17:15 W 30 Skłodowskiej 9
20	Diagnostic and curative endoscopy in surgery.	2	Lek. <b>Łukasz Bereziak</b>	09.04.	15:45-17:15 W 30 Skłodowskiej 9
21	Thoracic trauma.	2	Dr <b>Jacek Piątkowski</b>	16.04.	15:45-17:15 W 30 Skłodowskiej 9
22	Vascular and peritoneal access in end-Stage renal disease.	2	Prof. dr hab. <b>Zbigniew Włodarczyk</b>	30.04.	16:30-18:45 W 30 Skłodowskiej 9
23	Final exam.	2	Dr <b>Jakub Szmytkowski</b>		16:30-18:45

**3. PRACTICAL SKILLS CHART „Introduction to surgery”, III year, Medical Faculty,  
year 2018/2019**

Year III, group: Academic year: <b>2017/18</b>			
<b>Practical skill</b>	<b>Date when confirmed</b>	<b>Confirmed by</b>	<b>remarks</b>
Surgical hands scrubbing			
Examination of the surgical patient			
Behaviour in the operating theatre			
Wound management			
Removal of the surgical sutures and drains			
Insertion of the gastric tube			
Insertion of the bladder catheter			
Rectal examination			
Enema			
Peripheral vein puncture			
Measurement of the arterial pressure			

# Medical faculty, 4<sup>th</sup> year

**Site for classes and seminars:**

**Department of General, Hepatobiliary and Transplant Surgery**

**Jurasz University Hospital 1**

**M. Curie Skłodowskiej 9, Bydgoszcz**

**Head: dr hab. Maciej Słupski**

2018/19

## 1. SYLLABUS

**Subject:** Endocrine Surgery, Gastrointestinal Tract Surgery

**Study year:** 4

**Faculty:** medical

**Form:** lectures 15h

tutorials: 45 h

seminars : 30 h

**Final credit:** graded credit (grade point average from the following):

- entry exam (single choice test);
- exit exam (single choice test given after completion of all lectures);
- clinical activity score (oral, grade awarded by individual teachers).

**Test score thresholds:**

score	mark
92-100%	5,0
84-91%	4,5
76-83%	4,0
68-75%	3,5
56-76%	3,0
0-55%	2,0

**Course goals:**

- 1) to promote and develop teamwork skills, to acquaint the student with patient documentation, to teach the student to efficiently peruse databases and other sources of modern surgical knowledge
- 2) to review and reaffirm the skills acquired during the Introduction to Surgery Course during Year 3
- 3) to convey knowledge on the diagnosis and treatment of the most common surgical diseases of the gastrointestinal tract, endocrine system and spleen
- 4) to equip the student with the basic set of surgical skills useful in day-to-day practice, in accordance with the topics of seminars and lectures
- 5) to acquaint the student with the possible future developments in clinical surgery
- 6) to familiarize the student with the characteristics of the surgical patient, to teach them to provide adequate patient care in the perioperative period; to help the student understand the dynamics of various surgical ailments in order to provide them with sufficient knowledge to be able to successfully monitor the patients' changing condition and to react timely and accordingly
- 7) the course includes participation in at least one afternoon on call at the surgical ward

**By the completion of this course, the student should have gained sufficient theoretical knowledge in the following areas:**

1. Diagnosis and treatment of the surgical diseases of the esophagus
2. Diagnosis and treatment of the surgical diseases of the stomach and duodenum
3. Diagnosis and treatment of the surgical diseases of the intestines
4. Diagnosis and treatment of the surgical diseases of the liver and biliary tree
5. Diagnosis and treatment of the surgical diseases of the thyroid, parathyroid and adrenal glands
6. Diagnosis and treatment of portal hypertension
7. Basic coloproctological problems
8. Surgical diseases of the spleen, including staging for splenectomy
9. Epidemiology and consequences of obesity, staging for surgical treatment and the types of bariatric procedures
10. Basic principles of surgical oncology
11. Various types of alimentary treatment, including their benefits and pitfalls
12. The use of ultrasound in surgery

**By the completion of this course, the student should have gained sufficient practical knowledge in the following areas:**

1. Nutritional status assessment
2. Drug administration and perioperative patient care
3. Planning diagnostics and treatment in surgical diseases of the gastrointestinal tract and endocrine glands
4. Basics of administrative work (patient case file, daily write-ups)
5. Nasogastric and Sengstaken-Blakemore tube placement
6. Urinary bladder catheterization
7. Removal of sutures and drains

**Lectures during the course**

No.	Topic	Hours
1	Surgery of the thyroid and parathyroid gland	2
2	Bariatric surgery	2
3	Clinical nutrition part I – introduction	2
4	Clinical nutrition part II – nutrition	1
5	Principles of surgical oncology	2
6	Acute pancreatitis	2
7	New trends in surgery (SILS, NOTES, robotic surgery)	2
8	Introduction to the transplantation surgery	2

**Seminars during the course:**

No.	Topic	Hours
1	Ultrasound in surgery	2
2	Surgical conditions of the esophagus. Diaphragmatic hernias.	2
3	Surgery of the stomach and duodenum	3
4	Surgical diseases of the bowels	3
5	Hepatobiliary surgery	3
6	Surgery of the biliary tree	3
7	Diseases of the pancreas	3
8	Portal hypertension	2
9	Basic endocrine surgery	2
10	Basic coloproctology	2
11	Nutrition in surgery	2
12	Abdominal trauma	2
13	Exit seminar	1

**2. LECTURES: „Endocrine Surgery, Gastrointestinal Tract Surgery”,  
IV year, Medical Faculty, year 2018/2019**

<b>No.</b>	<b>Lecture topic</b>	<b>Duration</b>	<b>Lecturer</b>	<b>Date</b>	<b>Time</b>
1	Surgery of the thyroid and parathyroid gland	2	Dr <b>Jakub Szmytkowski</b>	08.10.	15:35-17:05 Jagiellońska 15 s. 58
2	Bariatric surgery	2	Dr <b>Jacek Szopiński</b>	09.10.	17:15-18:45 s. 58 Jagiellońska 15
3	Clinical nutrition part I – introduction	2	Dr <b>Jacek Szopiński</b>	15.10.	15:30-17:00 s. 10 Skłódowskiej 9
4	Clinical nutrition part II – nutrition	1	Dr <b>Jacek Szopiński</b>	17.10.	16:15-17:00 s. 58 Jagiellońska 15
5	Principles of surgical oncology	2	Prof. dr hab. <b>Wojciech Zegarski</b>	19.10.	15:30-17:00 s. 58 Jagiellońska 15
6	Acute pancreatitis	2	Dr <b>Jakub Szmytkowski</b>	23.10.	15:30-17:00 s. 58 Jagiellońska 15
7	Introduction to the Transplantation surgery	2	Prof. dr hab. <b>Zbigniew Włodarczyk</b>	24.10.	15:30-17:00 s. 58 Jagiellońska 15
8	New trends in surgery /SILS, NOTES, robotic surgery/	2	Prof. dr hab. <b>Marek Jackowski</b>	30.10.	15:30-17:00 s. 58 Jagiellońska 15
9	Final test	2	Dr hab. <b>Jacek Szeliga</b>		

**3. SEMINARS „Endocrine Surgery, Gastrointestinal Tract Surgery”,  
IV year Medical Faculty, year 2018/2019**

<b>No.</b>	<b>Topic</b>	<b>Hours</b>
1	Ultrasound in surgery	2
2	Surgical conditions of the esophagus. Diaphragmatic hernias.	2
3	Surgery of the stomach and duodenum	3
4	Surgical diseases of the bowels	3
5	Hepatobiliary surgery – pt. I	3
6	Hepatobiliary surgery – pt. II	3
7	Diseases of the pancreas	3
8	Portal hypertension	2
9	Basic endocrine surgery	2
10	Basic coloproctology	2
11	Nutrition in surgery	2
12	Abdominal trauma	2
13	Exit seminar	1

#### **4. SEMINARS FRAMEWORKS „Endocrine Surgery, Gastrointestinal Tract Surgery”, IV year Medical Faculty, year 2018/2019**

##### **Seminar No. 1. Ultrasound in surgery**

1. Physics of ultrasound (US) imaging
2. History of US imaging
3. Types of transducers
4. Types of US presentations
5. The use of contrast media in US imaging
6. Doppler ultrasound
7. Examples of US images
8. Intraoperative US
9. US in fields other than surgery

##### **Seminar No. 2. Surgical conditions of the esophagus. Diaphragmatic hernias**

1. Anatomy and physiology of the esophagus
2. Disorders of esophageal motility
3. Gastroesophageal reflux disease
4. Barret's esophagus
5. Esophageal diverticula
6. Esophageal neoplasms
7. Other diseases of the esophagus
8. Hiatal hernia
7. Congenital diaphragmatic hernias

##### **Seminar No. 3. Surgery of the stomach and duodenum**

1. Anatomy and histology of the stomach and duodenum
2. Stomach function
3. Pathomorphology and pathophysiology of the stomach
4. Diagnostic options in diseases of the stomach and duodenum
5. Peptic ulcer
6. Stomach cancer
7. Other neoplasms of the stomach
8. Gastric polyps
9. Duodenal neoplasms

##### **Seminar No. 4. Surgical conditions of the intestines**

1. Anatomy and physiology of the small intestine
2. Diverticulosis of the small intestine
3. Meckel's diverticulum
4. Tumors of the small intestine
5. Short bowel syndrome
6. Anatomy and physiology of the large intestine
7. Nonspecific inflammations of the large intestine
8. Diverticulosis of the large intestine
9. Constipation as a surgical problem
10. Polyps and polyposis syndromes of the colon and rectum
11. Colorectal cancer

12. Mechanical bowel obstruction
13. Functional bowel obstruction
14. Treatment of bowel obstruction

**Seminar No. 5. Hepatobiliary surgery - Liver**

1. Surgical anatomy and physiology of the liver
2. Diagnostic options in liver disease
3. Benign lesions
4. Primary malignant neoplasms
5. Secondary malignant neoplasms
6. Liver cysts
7. Liver abscesses
8. Liver transplantation

**Seminar No.6 Hepatobiliary surgery – Biliary tract**

1. Anatomy and physiology of the gallbladder and biliary tree
2. Cholelithiasis
3. Gallbladder polyps
4. Gallbladder cancer
5. Cholangiocarcinoma
6. Non – neoplastic conditions of the biliary tree

**Seminar No 7. Diseases of the pancreas**

1. Anatomy of the pancreas
2. Acute pancreatitis
3. Chronic pancreatitis
4. Pancreatic neoplasms

**Seminar No 8. Portal hypertension**

1. Anatomic principles of portal circulation
2. Pathophysiology of portal hypertension
3. Diagnostic options
4. Bleeding from esophageal varices
5. Portal gastropathy
6. Budd-Chiari syndrome
7. Ascites

**Seminar No 9. Principles of endocrine surgery**

1. Neutral goiter
2. Hyper- and hypothyreotic goiter
3. Thyroid neoplasms
4. Thyroiditis
5. Surgical management of thyroid disease
6. Postoperative complications
7. Hyperparathyroidism
8. Hypoparathyroidism
9. Endocrine tumors of the pancreas
10. Anatomy and physiology of the adrenal glands

11. Tumors of the adrenal glands
  - 11.1. Cushing's tumor
  - 11.2. Conn's syndrome
  - 11.3. Tumors of the adrenal medulla
  - 11.4. Adrenal incidentaloma
12. Surgical management of adrenal gland tumors
  - 12.1. Open and laparoscopic adrenalectomy
  - 12.2. Postoperative complications
13. Multiple endocrine neoplasm (MEN) syndromes
  - 13.1. MEN I (Wermer's syndrome)
  - 13.2. MEN II (Sipple's syndrome)
  - 13.3. Mixed syndromes
  - 13.4. Treatment

#### **Seminar No. 10. Principles of colorectal surgery**

1. Anatomy and physiology of the large intestine
2. Signs and symptoms of colorectal diseases
3. Imaging
4. Inflammatory diseases of the large intestine
5. Diverticulosis
6. Hirschprung's disease
7. Hemorrhoids
8. Anal fissure
9. Pilonidal cyst
10. Fistula in ano, perianal abscess
11. Fistulae of the colon and rectum
12. Stool incontinence
13. Pruritus ani
14. Rectal/ anal prolapse
15. Infectious diseases of the perianal region
16. Colorectal polyps (including hereditary polyposis syndromes)
17. Colorectal malignancy (colon, rectum, anus)
18. Principles of colorectal surgery

#### **Seminar No. 11. Nutritional therapy in surgery**

1. Prevalence of malnutrition
2. Causes of malnutrition
3. Types of starvation
4. Types of malnutrition
5. Consequences of malnutrition
6. Diagnosis – nutritional state assessment
7. Indications for nutritional therapy
8. Evaluating nutritional needs
9. Choosing type of nutritional support
10. Planning of nutritional therapy
11. Special nutritional requirements in various conditions
12. Intraoral nutritional supplementation
13. Intraintestinal feeding

## 14. Parenteral nutrition

### **Seminar No. 12. Abdominal trauma**

1. First aid
2. Imaging
3. Diagnostic surgery
4. Polytrauma
5. Isolated abdominal trauma
  - 5.1. Liver injury
  - 5.2. Spleen injury
  - 5.3. Pancreas injury
  - 5.4. Stomach injury
  - 5.5. Duodenum injury
  - 5.6. Gut injury
6. Types and mechanisms of trauma
  - 6.1. Blunt injury
  - 6.2. Penetrating injury
  - 6.3. Gunshot injury

**5. PRACTIAL SKILLS CHART „Endocrine Surgery, Gastrointestinal Tract Surgery”, IV year  
Medical Faculty, year 2018/2019**

<b>Practical skill</b>	<b>Date when confirmed</b>	<b>Confirmed by</b>	<b>remarks</b>
First aid, anti-shock treatment			
Surgical scrubbing			
Wound care wound local anesthesia.			
Wound hemostasis, wound debridement. Abscess incision and drainage			
Wound suturing and dressing			
Abscess incision and drainage			
Urinary catheterization			
Digital rectal examination			
Cannulation of large veins			
Clinical examination of the venous system			
Gastric tube placement Sengstaken-Blakemore tube placement			
Diagnostic peritoneal lavage			
Diagnosis of acute abdominal conditions			
Complete evaluation of a patient, including patient history, physical examination, differential diagnosis and treatment plan			

# Medical faculty, 6<sup>th</sup> year

SCHEDULE FOR THE ACADEMIC YEAR 2018/2019.

	week	week
group	23.10.-29.10.	29.11.-05.12.
English division	group 2	group 2

Site for classes:

Department of General, Hepatobiliary and Transplant Surgery  
Jurasz University Hospital No 1  
M. Curie Skłodowskiej 9, Bydgoszcz  
Head: dr hab. Maciej Słupski

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